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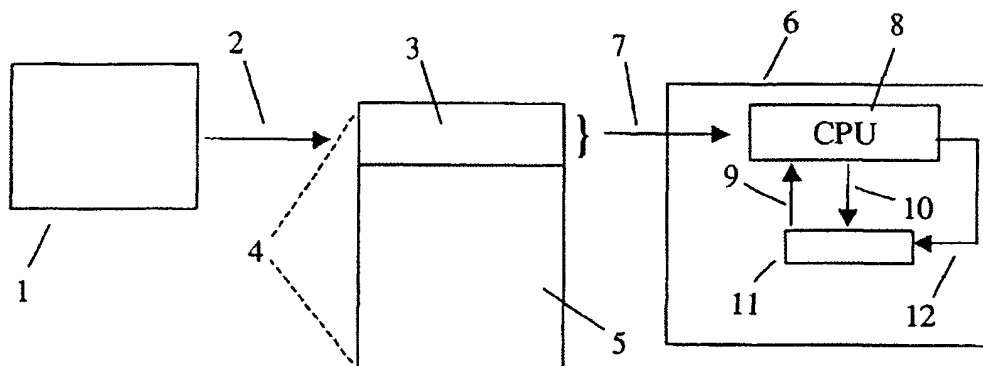
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(54) Title: **FAULT DETECTION IN AN INDUSTRIAL CONTROLLER DURING SAFETY CONTROL**



(57) Abstract: The invention deals with improved reliability in safety critical control of real world objects. Examples of real world objects subject to safety control are gas/smoke/fire detection systems, drilling equipment, pipes and pipelines, distillation columns, compressors, conveyor systems, boilers and turbines. A test application includes all relevant high-level language constructs and is repeatedly executed as assembler code in an industrial controller, which CPU is subject to fault detection during on-line safety control.

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